

Notice of Allowability

Application No.

10/619,646

Examiner

Suryaprabha Chunduru

Applicant(s)

ROBINSON, SIMON PIERS

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/13/07.
2. ☒ The allowed claim(s) is/are 55-61,73 and 74.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


SURYAPRABHA CHUNDURU
PRIMARY EXAMINER

1/5/08

DETAILED ACTION

1. Applicants' response and the amendment filed on September 04, 2007 have been considered and entered.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gary J. Gershik on November 19, 2007.

Please amend the claims as follows:

Please cancel claims 62-72.

Amend the 55-61, and 73-74 as follows :

Claim 55. An isolated nucleic acid molecule that encodes a PPO polypeptide of lettuce comprising:

- (i) the nucleotide sequence set forth in SEQ ID NO: 29;
- (ii) a nucleotide sequence that encodes the amino acid sequence set forth in SEQ ID NO: 30;
- (iii) a nucleotide sequence that encodes a copper-binding site of the amino acid sequence of (ii); or
- (iv) the nucleotide sequence that is complementary to (i) or (ii) or (iii).

Claim 56. The isolated nucleic acid molecule of claim 55, comprising:

- (i) the nucleotide sequence set forth in SEQ ID NO: 29;
- (ii) a nucleotide sequence that encodes the amino acid sequence set forth in SEQ ID NO: 30;
- (iii) the nucleotide sequence that is complementary to (i) or (ii).

Claim 57. A recombinant vector comprising a nucleic acid molecule comprising:

- (i) the nucleotide sequence set forth in SEQ ID NO: 29;
- (ii) a nucleotide sequence that encodes the amino acid sequence set forth in SEQ ID NO: 30;
- (iii) a nucleotide sequence that encodes a copper-binding site of the amino acid sequence of (ii); or
- (iv) the nucleotide sequence that is complementary to (i) or (ii) or (iii), within the vector molecule.

Claim 73. A method of increasing the level of PPO activity in a plant, cell, tissue or organ thereof, the method comprising:

- (a) introducing into the plant, cell, tissue or organ thereof a nucleic acid molecule encoding PPO polypeptide of lettuce comprising:
 - (i) the nucleotide sequence set forth in SEQ ID NO: 29;
 - (ii) a nucleotide sequence that encodes the amino acid sequence set forth in SEQ ID NO: 30;
 - (iii) a nucleotide sequence that encodes a copper-binding site of the amino acid sequence of (ii), and

(b) expressing the nucleic acid molecule to produce an enzymatically-active PPO polypeptide.

Claim 74. A method of decreasing the level of PPO activity in a lettuce plant, cell, tissue or organ thereof, the method comprising introducing a nucleic acid which hybridizes to a nucleic acid molecule in the lettuce plant, cell, tissue or organ thereof, comprising:

- (i) the nucleotide sequence set forth in SEQ ID NO: 29;
- (ii) a nucleotide sequence that encodes the amino acid sequence set forth in SEQ ID NO: 30;
- (iii) a nucleotide sequence that encodes a copper-binding site of the amino acid sequence of (ii); or
- (iv) the nucleotide sequence that is complementary to (i) or (ii) or (iii).

3. Applicants' request to rejoin the product claims with allowable method claims (MPEP § 821.04) is considered.

Claims 55-61 are directed to an allowable product claims. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claims 73-74, directed to the method of using the product, previously withdrawn from consideration as a result of a restriction requirement, found allowable, now subjected to being rejoined. Claims 73-74 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

4. The following is an examiner's statement of reasons for allowance:

Claims 55-61, 73-74 are allowed.

The present invention is drawn to an isolated nucleic acid molecule that encodes a PPO polypeptide of lettuce comprising the nucleotide sequence set forth in SEQ ID No. 29 and 30. The closest prior art Newman et al. and Boss et al. teach a fragment of nucleotide sequence comprising SEQ ID No. 29 and 30, however, the prior art do not teach the nucleotide sequence set forth in SEQ ID No. 29 and 30 reflected by the instant amended claims. Thus the instant invention was not taught or obvious over the closest prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 571-272-0783. The examiner can normally be reached on 8.30A.M. - 4.30P.M, Mon - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SURYAPRABHA CHUNDURU 11/21/07
PRIMARY EXAMINER